FACTORS OF ESTABLISHMENT AND DISCONTINUANCE OF AGRICULTURE IN PUBLIC SCHOOLS OF MINNESOTA

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BY

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FACTORS OF ESTABLISHMENT AND DISCONTINUANCE OF DEPARTMENTS OF AGRICULTURE IN PUBLIC HIGH SCHOOLS

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FOREWORD

The establishment of special departments of agriculture in the public schools with a specially prepared teacher began in Minnesota in 1909 under what was called the Putnam Law. Additional schools were established in 1911 by the Benson-Lee law. Some changes were made in the Minnesota statutes and the rules and regulations under them through succeeding years until 1917 when the federal vocational legislation, frequently designated the Smith-Hughes law, was enacted by the United States Congress. During this period under state legislation, aid and administration, and without federal legislation, aid or administration, special departments for the teaching of agriculture increased very rapidly in Minnesota. From ten schools maintaining such departments in 1909 the number increased to approximately 180 in the eight years to 1917.

In 1917 several important occurrences affected the number of departments in the state. Among these the entrance of the United States into the great war. The war closed most of the departments by drafting the men. The abnormal social and economic conditions following the war, together with the new federal relationships, due to the Smith-Hughes law, introduced new factors into the establishment and maintainence of these special departments of agriculture in the public schools.

While there was some mortality of departments in the period 1909 to 1917 the births overwhelmingly exceeded the deaths. The war years were disastrous in fatalities. The period following the war was one of halting and intermittent procedure not always marked by progress in the establishment and continuation of departments. There was little knowledge available to indicate why some departments failed and others succeeded.

These were the conditions existing when Professor Clinton R. Wiseman of the State College of Agriculture of South Dakota came to the University of Minnesota to obtain his doctor's degree in Agricultural Education. With his experience as a member of the agricultural education

faculty in college and his preceding experience as a teacher of agriculture and also as a state supervisor he was not only deeply interested in the question which his thesis illuminates but was admirably prepared to pursue such an investigation with superior intelligence and discriminating judgment. The procedure involved much labor and expense, especially of personal travel. Some of the data desired were elusive. Dr. Wiseman, however, was not satisfied with a mere library and questionary study of conditions though he used both of these processes, but he traveled many miles, studied many schools and interviewed many people that his procedure might be scientifically sound and his conclusions dependable and hence usable.

The friends of a modernized and vital curriculum in the public schools are deeply obliged to Dr. Wiseman for making this investigation and through it contributing to our knowledge of what conditions ought to exist in order that a special department of agriculture when established shall be successful and shall survive. While the principal study was made of Minnesota schools, Mr. Wiseman reinforced and verified his findings by a less intensified study of conditions in ten other states as is shown in Section V and in the appended check list of state supervisors. A thoughtful observance of his findings and recommendations should contribute materially to the success, efficiency and longevity of departments of agriculture in the public schools of Minnesota and of the other states of the Union.

This monograph is a condensation of the complete original thesis but retains the more vital and significant portions of the thesis organized in a form to be more serviceable to those who wish to benefit from its use than the original might have been. By including the questionary forms, and the check lists which he used in his investigation, he has made it possible to apply easily his techniques to a study of conditions in any other state or group of states by any competent interested person, thus making the whole United States his debtor not only for his conclusions but for his procedures.

Ashley V. Storm.

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A STUDY OF THE FACTORS FOR THE PLACEMENT AND ESTABLISHMENT OF DEPARTMENTS OF VOCATIONAL AGRICULTURE

SECTION I

INTRODUCTION

Where shall Departments of Vocational Agriculture be placed? Establishment of such departments in the public high schools in local communities has been dependent upon state and federal aid for such work. Since sufficient state and federal funds are not available to place such departments in all our high schools, selection of suitable centers is necessary. What then shall be the bases for selection? Both state and local school administrators have come in contact with many proposed criteria and standards for such selection and have made use of several of them. Some have urged that agriculture departments be placed in the smaller high schools, the argument used being that in this way the departments are "closer to the farm." Others have urged that they be placed in the larger and consequently "stronger" high schools which have a considerable farmer clientele. Some have advised the placement of such departments with the accompanying state and federal "aid" in the poorer and needy high schools. Still others have advocated that a special effort be made to place them in consolidated schools.

The different states have set their own standards and minimum requirements. Some departments of agriculture have continued year after year with good interest and patronage. In others, the work has continued but has encountered difficulties. In still others it has carried on for a few years and then has been discontinued. The problem is a vital one and deserves study from many angles.

Object of the Study

The data of this study mainly concern departments of Vocational Agriculture in Minnesota for the years from 1918-19 to 1926-27. We are mainly concerned with the features and factors of communities, high schools and agriculture departments which have apparently had considerable to do with the continuance and success or the discontinuance of departments of agriculture. Over a period of years state standards and requirements for placing and establishing the work have been arbitrarily set up growing out of the experience of the administrators responsible. However, as the work develops and expands and we have more experience, we should be able to profit by that experience. We should be able to make more progress by the strategic placement and organization of the work in centers where the work is reasonably sure to "take hold." Our twelve years experience with work in Vocational Agriculture should be sufficient, which when analyzed, will yield objectively derived criteria or principles of placement which when reasonably applied will serve, in a dependable manner, as guides to check proposed locations for new departments. Our first problem then was to study the high schools and departments of Vocational Agriculture to find what their features and characteristics were and which of them were apparently the potent factors of continuance and success or of discontinuance of the departments of agriculture. Our second problem followed from the first in stating, in the form of principles or criteria, those factors which seemed to be most important in the persistence of the agriculture departments.

The criteria stated were objectively arrived at and are borne out by the substantiating data.

Data From Minnesota and Other States

The data were largely secured from the study of some 135 high schools in the state of Minnesota which had departments of Vocational Agriculture between the years 1918-19 and 1926-27. As explained in the study many

comparisons were made between the group of high schools where agriculture continued and where it discontinued. Section V of the study deals in a less intensive way with the situation in several other states and presents principles for placement of agriculture departments growing out of the experiences of other states as reported by their state supervisors.

Sources of Data and Methods of Study

In the main the data used in this study were of two general types (a) Essential data on the features and characteristics of and information about the high schools and of the departments of agriculture in them and (b) Questionnaire and interview returns of information and judgments from strategic people who had had some administrative responsibility with the schools and the departments.

The essential data were on such characteristics and features of high schools and agricultural departments as: establishment and duration of the departments, size of high school enrollment, school district valuation, tax rates and indebtedness, consolidation, geographical location, enrolment in the agricultural department, etc. These essential data were secured from the reports and records in the office of the state supervisor of Agricultural Education and from other documentary sources.

The data, in the form of information and judgments from strategic people who had had administrative responsibility of the schools and agricultural departments, were secured by questionnaires and interviews on essentially the same characteristics and features of high schools and agriculture departments as mentioned above. The strategic people for any one school were: the superintendent of schools, the present agriculture instructor (or ex-agriculture instructor in case of discontinued departments), the state supervisor of agriculture and school board members.

The interviews were with the earlier and present state supervisors of the work and others interested. The char-

acter of the data secured is revealed in the tables reported. The general nature of the rather lengthy questionnaire used is likewise revealed in the tables and descriptions. (The questionnaires used are found in the appendix).

Where possible and feasible to do so comparisons were made between features of schools and departments where the departments continued and where departments discontinued. On many of the factors of study, both essential data and information and judgments of strategic people were secured. In this manner one type of data was made to serve as a check on the other.

Summary of Schools From Which Data Were Secured

1. Number of schools having departments of agriculture in the year 1926-27 66
2. Number of schools having departments of agriculture discontinue between 1918-19 and 1926-27 (Of these 29 were federal aided).....69
3. Essential data secured for all of above .... (See Tables 1-9)
4. Number of schools on discontinued list checked by state supervisors 69
5. Number of schools on discontinued list checked by instructors 44
6. Number of schools on continued list checked by instructors 38
7. Number of schools on discontinued list checked by ex-superintendent 43
8. Number of schools on continued list checked by ex-superintendent 37

The Data and Their Presentation

As will be revealed in the incorporated tables, the data are tabulated in frequencies and usually percentages of the total possible numbers are given.

Wherever possible and feasible, local and school conditions for continued and discontinued departments were contrasted. Such procedure assists in drawing valid conclusions and stating valid principles. For several factors

the direct comparison of the larger and smaller schools has brought out significant information. On many of the factors studied, the results from the essential data and from the questionnaire and interview returns are compared. The general agreement of the conclusions drawn from each set of data gives credence to the general reliability of the "judgments" as reported. The reader is cautioned not to think of these "judgments" as mere opinion. They are the "judgments" of superintendents, agriculture instructors, state supervisors and school board members who are reporting only for those particular schools and departments for which they have been responsible for various periods of time. They know the situations intimately and no one else can have better knowledge of the situation.

Since essential data were secured and rechecked from all the schools on our lists there can be no question of reliability on that point. For enrolments, tax rates and valuations an average of three years was used to give a more stable figure than any one year would give.

For the questionnaire returns there, of course, is less reliability. However, we found that there was a strong tendency for the different strategic groups to name the same factors as being important. This is made clearer by Chart I in Section III.

The correlation by the method of ranks between the rankings of factors given by 25 ex-superintendents and 25 ex-instructors of 23 factors as applied to 25 schools was .57. The correlation of the ranking of factors of these same 25 ex-superintendents to the larger group of ex-superintendents (44) was .90 and the correlation for the smaller group of 25 ex-instructors with the larger group (43) was .88.

Other evidences of significant reliability are brought out as the data are presented.

SECTION II

FACTORS OF CONTINUANCE AND DISCONTINUANCE OF DEPARTMENTS OF AGRICULTURE

Preliminary Consideration of Factors

Both the state and federal governments are and should be vitally interested in the strategic placement of departments of Vocational Agriculture. Economy and success of the work dictates that those communities, which are able and willing to undertake the task, should be assisted and stimulated in the work.

This study is an objective appraisal of several factors, presumably important, in the placement and continuance of the work. The data were secured on some 135 high schools in Minnesota which had departments of agriculture 1918-19 and later. For purposes of study these were divided into two groups, those continuing their agriculture work and those which had discontinued it sometime within that period of time. The first purpose of this study was to determine the relative potency with which these factors operated in these two groups of schools. The second and really our main purpose was, from such an objective study of these factors, to derive certain principles or criteria to be used in checking both in proposed locations for new departments and in older departments now operating.

Factor I—Size of High School

Shall the agriculture department be placed in the small high schools or in the larger ones which have sufficient agricultural interests to warrant such a department? Number enrolled in high school is used as a measure of size of high schol in this section. First, the matter of selection of high schools is taken up and secondly, the matter of continuance and discontinuance of agricultural departments in those high schools of different sizes is presented.

(a)—Selection of High Schools Where Agricultural Departments Were Placed

First we note the distribution of Minnesota high schools by size and the placement of agriculture departments in these schools.

Table 1—Distribution by Size of High Schools in Minnesota and the Distribution by Size of High Schools Where Agriculture Departments Were Placed.

Items		Size of High School Enrolment					
		Totals	Less Than 50	Less Than 100	More Than 100	More Than 200	More Than 300
1. High Schools in Minnesota ...	Number	420	90	250	170	72	39
	Per-centage	100	21.4	59.5	40.3	17.1	9.2
2. High Schools having Ag. Dept. Operating 1918-1919 and later.....	Number	133	9	42	91	48	28
	Per-centage	100	6.7	31.5	68.5	36.0	21.0
3. Percentage of High Schools in each size group having Ag. Dept.....			10	16.8	53.5	66.6	71.8

In Table 1, Item 1, we readily see the predominance of smaller high schools. A comparison of the percentages in Items 1 and 2 clearly shows a tendency to select, for placement of agriculture, the larger schools of the group rather than the smaller ones. In Item 3 this point is brought out more strongly. It should be read "of high schools of less than 50 in size only 10 out of 90 or 10 per cent were chosen for an agriculture department while in the high schools of more than 300 in size nearly three out of four (71.8 per cent) were so chosen."

(b)—Continuance and Discontinuance of Agriculture Departments

Table 2—Total numbers and Percentages of High Schools of Different Sizes Where Agriculture Continued and Discontinued.

High School Size Groups	Total Numbers	Percentages of High Schools	
		Agr. Continued	Agr. Discontinued
1. Under 50 students.	11	36.4	63.6
2. Under 100 students	45	40.0	60.0
3. Over 100 students.	89	54.0	46.0
4. Over 200 students.	46	60.0	40.0
5. Over 300 students.	27	70.0	30.0

These data in Table 2 should be considered in light of the fact that a period of time from 1918-19 to 1926-27 is considered. The data in Table 2 point out the greater persistence in the larger high schools. Ordinarily we would associate the highest continuance with the higher and better selection. The data of Tables 1 and 2 indicate this is not the case. In the larger schools there is much less selection and a much lower mortality of agriculture departments. We are thus led to believe that size of high school is a significant factor of continuance.

Besides the essential data as just presented, judgments from strategic people (ex-superintendents, ex-instructors, state supervisors and school board members) were secured as to the strength of influence various factors had in causing continuance or discontinuance of agriculture departments. One of these factors considered by these people was size of high school. Among the persisting departments the superintendents and instructors very infrequently mentioned small size as a problem. Out of 70 replies none indicated small size of high school a factor of strong influence and only two of the 70 indicated it as a factor of medium importance. However, for the discontinued departments the situation was different. Both ex-superintendents and ex-instructors saw small size of high school as a strong factor for discontinuance. For the high schools under 100 students in size in fully one-third

of the cases small size was indicated by these people as a strong factor for discontinuance. In the schools over 100 students small size as a strong factor was indicated scarcely one-third as frequently by these strategic people.

Our results from this study in Minnesota do not bear out the conclusion of Dr. F. W. Lathrop in Federal Board Bulletin No. 84. Dr. Lathrop concludes:

> "There is little difference between urban and rural places in this respect" (Discontinuance of agriculture departments). "What little difference there is indicates a greater permanence in the rural places. Notwithstanding the smaller resources of the rural places, no more departments are dropped than in urban places."

The present study shows that despite the closer selection of smaller high schools for agriculture departments, there is much more persistence among the relatively larger high schools (those of 100, 200 and 300 pupils) than among those of below 100 in enrolment. The judgments of strategic people working in these schools and departments bear out this general conclusion. Where agriculture persists more generally in the larger schools the strategic people do not see that small size is a threatening problem. Where the agriculture has discontinued the strategic people tend to judge that small size of high school has been a strong factor causing discontinuance and conspicuously for the schools of less than 100 enrolment.

These general findings are embodied as one principle or criterion in the list of principles set up in the list of principles at the conclusion of this study.

Factor II—Economic Aspects of the School District

What about the economic aspects of the school district where agriculture is placed? Do assessed valuations and tax rates seem to make a material difference? These two economic aspects are considered in this section.

(A)—ASSESSED VALUATION OF SCHOOL DISTRICTS

These data are for 131 of the 133 high school districts in Minnesota which had agriculture 1918-19 and later. The data were secured from the reports of the

high schools in the office of the State Department of Education. In order to secure a more stable figure, the average for the three years, 1923-24, 1924-25 and 1925-26, were taken. Table 3 shows distribution by assessed valuation.

Table 3—Distribution by size of High Schools and by Assessed Valuations of School Districts Having Agriculture 1918-1919 and Later.

Assessed Valuation	Total Numbers	Percentages of High Schools Enrolment	
		Under 100	Over 100
1. Under $250,000.....	8	87.5	12.5
2. $250,000-$500,000...	30	60.0	40.0
3. $500,000-$1,000,000 .	40	30.0	70.0
4. $1,000,000-$2,000,000	29	10.5	89.5
5. $2,000,000-$4,000,000	9	11.1	88.9
6. Over $4,000,000.....	15	000.0	100.0

The column of total numbers in Table 3 shows the numbers of high schools having agriculture in each valuation group. As would naturally be expected the larger high schools were in districts with larger valuations.

Table 4 shows tendencies of schools in these valuation groups to continue and discontinue their agriculture.

Table 4—Numbers and Percentages of High Schools in Districts of Different Assessed Valuations Where Agriculture Continued and Discontinued.

Assessed Valuations	Total Numbers	Percentages of High Schools	
		Agr. Continued	Agr. Discontinued
1. Under 250,000 ...	8	25.0	75.0
2. Under 500,000 ...	38	34.3	65.7
3. Under 1,000,000 ..	78	38.5	61.5
4. Over 1,000,000 ...	53	66.0	34.0
5. Over 2,000,000 ...	24	87.5	12.5

Table 4 conclusively shows that assessed valuation of school district is a decisive factor in continuance. According to the table, in only one-sixth as many schools of the larger size does agriculture discontinue as compared to the

smaller size. These data are in close agreement with the data on size of high school as measured by enrolment in high school. Of all these schools the median valuation was $750,000. The percentage of continuance of the group above the median was 63.4 per cent as against 34.9 per cent of the group below the median. Evidently schools with the lower district valuations have difficulty in raising money for school support in excess of the bare requirements and have little or no surplus to provide special lines of work such as agriculture.

(B)—TAX RATES OF SCHOOL DISTRICTS

The tax rate is the second of economic aspects here considered.

Table 5—Distribution by Size of High Schools and by Tax-Rates of School Districts Having Agriculture 1918-1919 and Later.

Tax Rates In Mills	Numbers of H. S.	Percentages of High Schools Enrolment	
		Under 100	Over 100
Below 20	3	66.6	33.3
20-30	21	38.0	62.0
30-40	43	25.6	74.4
40-50	32	21.9	78.1
50-60	15	20.0	80.0
60-70	10	50.0	50.0
Over 70	7	70.5	29.5

In Table 5 considerable irregularity is exhibited. It is significant to note that most of the small tax rates and the most of the large tax rates are found in the small high schools (those under 100 enrolment).

Table 6—Numbers and Percentages of High Schools of Different Tax Rates Where Agriculture Continued and Discontinued.

Tax Rates In Mills	Numbers of H. S.	Percentages of High Schools	
		Agr. Continued	Agr. Discontinued
1. Under 30	24	33.3	66.6
2. 30 to 40	43	58.2	41.8
3. 40 to 50	32	56.5	43.5
4. Over 50	32	40.0	60.0

Table 6 shows that the two middle tax rates are considerably more conducive to continuance than are the lower and higher tax rates.

Besides the essential data just presented on economic aspects of school districts the questionnaire returns of the strategic groups are well worth our consideration. The pertinent question used on which these people checked was: "High school too small to successfully and economically maintain such a department." The replies were given by these people concerning schools where the agriculture departments had been discontinued. For schools under 100 enrolment the reports of these people tend strongly to support the findings of the essential data. The ex-superintendents and ex-instructors see small size an important factor in about one-third of the cases. (33.3 per cent and 31.2 per cent respectively) while the state supervisors see it an important factor in 57.8 per cent of the cases. The criterion or principle on economic status is embodied in the concluding list of principles.

Factor III—Enrolment of Students in Departments of Agriculture

A reasonable number of students per department is both reasonable to expect and economical. States have recognized this by setting up minimum enrolments. There is considerable question of the wisdom of establishing a department at a center if a reasonable enrolment from year to year is not evident.

The actual data for this section of the study were secured from the records on file in the office of the State Supervisor. In order to secure a more stable figure, data for each school for two or three years were averaged. Data are given for federal-aid agriculture departments.

This table shows a decided tendency for larger departments to continue. Really none over 24 in enrolment discontinued. Using 20 as a dividing line (20 as a nominal number for a department) the percentage of continuance is signally in favor of the larger departments—75.0 per cent of the larger group continuing and 53.0 per cent of the smaller group continuing.

Table 7—Total Numbers and Percentages of Agriculture Departments of Different Sizes Where Departments Continued and Discontinued.

Enrolment Per Department	Numbers of H. S.	Percentages of High Schools	
		Agr. Continued	Agr. Discontinued
1. Under 10	5	40.0	60.0
2. 10-15	18	50.0	50.0
3. 15-20	26	57.7	42.3
4. 20-25	14	64.4	35.6
5. 25-30	6	100.0	00.0
6. 30 and over	4	100.0	00.0

Many states have sought to set up a minimum enrolment. In Minnesota, a department should have at least 10 boys in the agriculture course.

From our questionnaire returns all the strategic groups indicate that for high school of under 100 enrolment where agriculture discontinued, it was much more a matter of "too few students in the agricultural course" rather than "school unable to meet minimum enrolment requirements."

It need only be mentioned here that high schools with low total enrolments are much more likely to have smaller classes, both agriculture and academic. Also, a course like agriculture is an elective course and such classes tend to be smaller. No data on sizes of high school classes in different sizes of high schools in Minnesota were available. However, in the New York Rural School Survey[1] we find such information and derive these data for that state:

[1] Ferriss, E. N. Rural School Survey of New York.

Size of High School	Percentages of Classes of Different Sizes		
	Under 10	Under 15	15 and Over
1. Under 50	72.9	89.8	10.2
2. Under 100	66.6	80.1	19.9
3. 100 and over	24.8	36.8	63.2

These data merely furnish a reasonable background for the better interpretation of size of agriculture classes in smaller high schools. In a small high school where 90

per cent of the classes are under 15 in size we cannot expect to have very large agriculture classes.

Our principle here seems to be that, in the interest of larger classes in agriculture, large enough to meet minimum state requirements and at least approach economical administration, larger high schools (those over 100 enrollment) are almost necessary. The continuing successful departments tend to have larger agriculture department enrolments and are in the larger schools.

Factor IV—Geographical Distribution of Department Agriculture Interests of the Community

Since Vocational Agriculture is to prepare for farming, the agriculture department should be placed close to where the students are, both to guarantee their attendance and to guarantee suitable agricultural facilities with which to work.

A consideration of the geographical and agriculture placement of some 135 agriculture departments in Minnesota indicates that of those numbers 36 were placed where cultivated land in farms constituted over 75 per cent of the area, 50 were placed where the cultivated land percentage was 50 per cent to 75 per cent, 14 were placed where it was 25 per cent to 50 per cent and 30 were placed where it was under 25 per cent. Thus agriculture departments seem to be generally distributed over the state rather than grouped in the more strongly agricultural areas. The size of the last group mentioned is due to the placement of agriculture in several of the iron range towns, having better schools.

A tabulation was also made of agriculture departments according to a scheme of farming areas by types of farming suggested by the reports of the Department of Farm Management of Minnesota Agriculture College. The agriculture areas were:

Area a—Essentially Dairying.

Area b—Essentially Livestock and Dairying major and grass minor.

Area c—Essentially grass major and livestock and dairying minor.

The amount of continuance and evident success of departments in these different areas did not vary much.

The data at hand seem to indicate that, in the main, the agriculture departments seem well placed regionally and agriculturally. In our replies very little competition between schools for agriculture students was revealed. The reasonable principle here implied is that the departments should be well distributed geographically and placed well agriculturally—both to advertise the work in different sections of the state and to avoid competition between departments for agriculture students.

Factor V—The Agricultural Depression and Retrenchment In School Affairs

For most of the factors being considered in this study, the administrators can in one way or another exert some control either in placing the agriculture department or providing for it or securing a good instructor after it is established. However, for this factor, an agricultural depression and resulting retrenchment in school affairs, the school superintendent or state supervisor can exert very little or no control. About all they are able to do is to recognize conditions as they exist and try to meet the situation effectively. We may take the judgments of the farm economists as to the extent of an agricultural depression in recent years as they undertake to measure it in terms of prices of farm products and the purchasing power of those products. There has been an agricultural depression and it has affected certain rural social and rural and agricultural education agencies. The collegiate agricultural enrolment for Minnesota declined from 343 and 352 respectively for the two years 1919-20 and 1920-21 to 204 and 206 for the two years 1925-26 and 1926-27. This is a decline of approximately 40 per cent. For the United States as a whole, for the corresponding years, the collegiate agriculture enrolment declined from 15,370 and 15,434 for the two earlier years to 12,710 and 12,957 for the two latter years. This decline is approximately 20 per cent. It is not our purpose here to state the reasons

for this decline. It is very probable that the agriculture depression either directly or indirectly was somewhat causal.

For the same period of time the number of county agencies in Minnesota declined from wartime strength in 1918 of 87 to 63 for each of the years 1925 and 1926.

According to the report of the Association of Land Grant Colleges by a special committee at Chicago in 1927 in describing the agriculture situation as due to continued low incomes, the committee states:

> "Apparently there has been a decline in the farm population from 31½ million in 1920 to about 29 million in 1927. Between 1920 and 1925 the farm population declined in all states except New Hampshire, Massachusetts, Rhode Island and Connecticut in the east and California, Washington and Nevada in the west."

In 1920, Minnesota had 897,181 people on farms as against 875,749 in 1925. With such agencies suffering a decline during this period, it is evident that discontinuances in agriculture departments were not due entirely to causes inherent in the high school nor in the agriculture department. The probable effects were first, those on the attitudes of the people and secondly, this reacted on the institutions.

In our study, the different strategic groups checked on whether the agriculture depression was a rather strong factor in causing discontinuance in schools where it did discontinue. They reported it was a strong factor in more than 25 per cent of the cases. This of course does not mean that it was the only factor operating. In case of discontinuance it seemed as if a combination of factors was responsible.

One immediate result of the agricultural depression in these schools is retrenchment. Since special departments are provided for after the regular standard high school work is provided for, in retrenchment, the special departments as agriculture, etc., tend to be dropped first. Our respondents indicated that "general retrenchment in

school and all school costs too high," were relatively strong factors where discontinuance did occur.

Where agriculture discontinued due to retrenchment, very often other special departments suffered a like fate. This was more likely the case in the smaller high schools. For schools of 100 students enrolment, where agriculture discontinued and where Home Economics was a special department, the latter discontinued in 25 per cent of the cases. Commercial work suffered a like fate in 25 per cent of the cases. Manual Training discontinued in 62.5 per cent of the cases and Teacher Training in 75 per cent of the cases. On the other hand, reports from 31 schools with federal-aid agriculture departments which continued, only six had any discontinuance of other special departments. The evidence here presented, considering all special departments, seems to indicate that retrenchment in school affairs, however brought on, caused many other special departments along with agriculture to discontinue. In times of depression, superintendents and state supervisors should be alert to the development of wrong attitudes.

SECTION III

FACTORS OF CONTINUANCE AND DISCONTINUANCE OF DEPARTMENTS OF AGRICULTURE

(Continued)

Factor VI—Consolidated Schools

The argument is often advanced that we should institute the agricultural work in the consolidated schools, the presumption being that thereby the work is placed nearer the farmers (those to be served) and in the districts where they pay taxes. For a total of 135 schools having agriculture 1918-19 and later, 51.5 per cent were consolidated and 48.5 per cent were not consolidated. The percentage continuance of vocational agriculture in both groups was very nearly the same. From such unanalyzed data the general conclusion would be that it makes practically no difference whether the schools were consolidated or not. However, a more detailed analysis reveals a very important difference, particularly among the smaller schools. Consolidations are most often smaller high schools. Of some 90 high schools of Minnesota of fewer than 50 students, 63 per cent of them were consolidated. Of 250 high schools of fewer than 100 students each, nearly 53 per cent were consolidated, while for 170 high schools of over 100 students each, about 37 per cent were consolidated. These data furnish a suitable background for interpreting the data of Table No. 8.

Table 8—Number of High Schools of Minnesota of Different Sizes Having Agricultural Courses, 1918 and Later, and Number and Percentage of Consolidated High Schools in Each Size Group.

Items	Size of High School According to Enrollment		
	Less Than 50 Students	Less Than 100 Students	100 Students and Over
1. Total number of High Schools having Agriculture Courses 1918-19 and later..	9	42	92
2. Number of Consolidated High Schools having Agriculture 1918-19 and later..	8	28	41
3. Percentage Consolidated High Schools of each size group.	88.9	66.6	44.5

Where agriculture is placed in the smaller schools there is a pronounced tendency to select consolidated schools for its placement. For the larger size groups as 200 and 300 students in high school, having agriculture, proportionately fewer were consolidated.

In a previous section we have already pointed out the fact of greater persistence of agriculture departments in the larger high schools, over the smaller ones. We are now concerned with the persistency in consolidated schools.

Table 9—Percentages of High Schools of Minnesota of Different Sizes, Consolidated and Not Consolidated, Where Agriculture Continued and Discontinued.

Groups	Size of High School According to Enrollment			
	Less Than 100 Students		100 Students and Over	
	Percentage		Percentage	
	Continued	Discontinued	Continued	Discontinued
1. Consolidated ...	46.5	53.5	56.1	43.9
2. Not Consolidated.	16.7	83.3	53.0	47.0

According to the table, while for the smaller schools, consolidation did not guarantee continuance of agriculture, the situation was very much better in the consolidated than in the non-consolidated schools. The real advantage is much more when we stop to consider that among these consolidations there was a larger selection for agriculture than among the non-consolidated. Whereas about one-half of this group of small schools are consolidated they furnish two-thirds of the number attempting the agriculture work. For predictive purposes, our data show agriculture has a considerably greater chance of persisting in small high schools consolidated than in small high schools not consolidated.

Factor VII—Agriculture Extension Work

Two conditions of the early agriculture work in Minnesota were: the school was required to organize farmers' institute work in cooperation with the extension division of the agricultural college and the instructor, hired for the full calendar year of 12 months, was to put in all his time teaching agriculture and doing extension work.

Our concern in the matter for the later years is to note any effect that organized extension work in agriculture had upon the success and continuance of agriculture work in high schools. Where the agriculture departments discontinued there, of course, are the possibilities that one caused the other to discontinue and also that other factors as an agricultural depression, caused both to discontinue. Our data show that in counties where county agencies continued 93 agriculture departments had been organized and 56 per cent of these had continued. On the other hand, in counties where county agent work had discontinued, 39 agriculture departments had been organized but only 30 per cent of them had continued. Likewise there was a tendency for agriculture in high school to drop out of county seat towns when the county agent work dropped out. Outside of a few specific cases mentioned, these data show that the beginning of county agent work did not cause agriculture departments to discontinue. Additionally we must bear in

mind that agriculture in high schools is now operating in 33 counties which have county agent work with hundreds of contacts each year. Neither the County Agent Leader nor the State Supervisor of Agricultural Education feels that there is conflict between them.

Factor VIII—Agriculture Instructor and His Program of Work

We are considering in this section, first, certain problems relative to the instructor himself and secondly, certain phases of the work of the department as carried out by the agriculture instructor. There is no doubt but what the instructor is a strategic element. Often we have heard "as is the teacher—so is the school." The federal congress recognized this in setting up the vocational program by allotting funds to pay teachers' salaries and also required states to provide for training vocational teachers.

Training of Instructor: We have reason to believe that the training of the teacher of vocational agriculture as compared to other high school teachers is reasonably high. Holton[2] describes a typical teacher as follows:

> "The teacher of Vocational Agriculture is a man 30 years of age; he has a Bachelor of Science degree from a standard agricultural college and has had nine semester hours of graduate work; he was born and reared on a farm and has had 11 years of practical experience in farming; he has been teaching vocational agriculture three years and he has had one year of experience in teaching other subjects before he began teaching vocational agriculture; he receives an annual salary of $2400.00."

Hutson in a Minnesota study entitled "Training of High School Teachers in Minnesota" shows the training of different groups of high school teachers in terms of percentage of teachers having degrees. The group of agricultural teachers compares very favorably with the best, being 95.9 per cent as against the percentages for groups in English, Mathematics, History and Botany at 93.3 per

[2] Holton, E. L. A Study of the Professional Training of Teachers of Vocational Agriculture. Federal Board for Vocational Education. Bulletin No. 122, 1927.

cent, 93.2 per cent, 94.8 per cent and 100.0 per cent respectively. For the commercial teachers the percentage was 52.2 per cent, for Home Training 72.1 per cent and for Manual Training 22.1 per cent.

To the ideal that high school teachers should have made "a detailed and specialized study of the subjects to be taught," the agricultural teachers measure exceedingly well. This same study shows them far ahead that of any of the other groups in total number of hours of credit in their major study.

Tenure: Because the agriculture department makes so many community contacts, a reasonable tenure of instructors seems desirable. It is practical to consider both total teaching experience of the instructors and years of service at a certain school.

According to the Minnesota Visitor, December, 1924, of the Minnesota agriculture instructors in 1924-25, 50 per cent had taught five years or more. The following tables shows the tenure at the same school:

Table—Numbers and Percentages of Agriculture Teachers with Differing Years of Service.

Number of Years of Service	Smith-Hughes and State Aided Department	
	Number of Teachers	Percentage of Total
1	22	33.3
2	19	28.8
3	8	12.1
4	8	12.1
5 or more	9	13.7

In some of these schools the departments are young. One-third of the instructors have one year of service at a school. Of the total, 37.9 per cent have remained three years or more at the same place. According to Professor Holton's data for 663 agriculture instructors in the United States, the median number of years taught was 4.0 and the median number of years of teaching agriculture was 3.0. Thus on this score the Minnesota agriculture teachers compare favorably with the general average. According to the Martin Study of Tenure of Agriculture Teachers

in Mississippi, Federal Board for Vocational Education, Monograph No. 4, the mean tenure of agriculture instructors for that state was 2.41 years.

For the group of continued departments in Minnesota, included in this study, the average tenures of the instructors was computed as 3.1 years. Eleven out of 45 or over 25 per cent had tenures of five years or more and 17 per cent had a one year tenure. On the other hand, for the discontinued departments, the average tenure of instructors was computed as 1.82 years. Scarcely 4 per cent were for five years or more and more than 50 per cent were for one year. These data definitely show the longer tenures in the continuing departments and furthermore we must realize that these computations were for tenures not yet completed.

Check List on the Instructor:[3] In the checks on factors of discontinuance of departments, the state supervisors saw frequent change of the agriculture instructor a potent factor for discontinuance in slightly over 50 per cent of the cases. The ex-superintendents of these schools saw it as a strong factor of discontinuance in over 25 per cent of the cases, while for schools continuing agriculture only one superintendent out of 32 replying, indicated that this was a difficult problem in their school.

Two other questions put to these strategic people were:

1. "Did the instructor fail to adequately organize and carry out the work of the department?"
2. "Did the instructor fail to make the work of the department vital in the life of the community?"

For the discontinued departments the ex-superintendents saw each of these conditions obtaining in over one-third of the cases and the state supervisor saw them obtaining in over 40 per cent of the cases, while in the continuing departments the mentions were exceedingly infrequent.

[3] The check list used is to be found in the appendix. The state supervisors and the superintendents checked the list.

In order to better evaluate the work of the agriculture instructors, we secured from the superintendents and supervisors, who really knew the work of the instructor, checkings concerning the instructors on several items. The checkings are on instructors last at work where agriculture departments discontinued. The check list was so constructed that the respondent was to indicate for each item which of these qualities best applied: **very good, good, fair** and **poor.** The items are indicated in the accompanying table but we have tabulated here the combined **fair** and **poor** responses. The frequencies were first found and then reduced to percentages of the whole number possible as indicated in the first and third columns of the table. These were then reduced to ranks as indicated in the second and fourth columns respectively. Inspection will indicate to the reader the relatively close agreement of these two groups. The average disparity of ranks is indicated. Thus in the table the lower the percentage and the higher the rank number is, the better the trait or the practice is, while the higher the percentage and the lower the rank number is the worse the trait or practice is.

Table 10—Comparison of Judgments of Ex-superintendents and State Supervisors as to Extent and With What Relative Ranking They Regarded Certain Items as Applying to Agriculture Instructors.

Check Items on Ex-Instructors	Combined Responses Indicating Fair and Poor on Each Item			
	Ex-Superintendent		State Supervisor	
	Percentage	Rank	Percentage	Rank
1. Mature enough for the work	20.6	11	36.3	10
2. Adequacy of experience teaching agriculture	43.0	6.5	61	6
3. Adequacy of his preparation for organizing and teaching vocational agriculture	33.3	9	56.5	7
4. Personal qualities for success in work	61.2	2	73.5	5
5. Identified himself well with the best interest of village and city there	43	6.5	41.1	9
6. Developed the agricultural department as an integral part of the school	41.6	8	53.1	8
7. Cooperation with the superintendent	19.8	12	12.4	12
8. Cooperation with the principal and with fellow workers in school.	25.7	10	14.5	11
9. Success of his classroom work	44.6	5	61.2	4
10. Success of his project work	55.9	3	88.1	3
11. Adequately broad program of work in the agricultural department (all day, part time, evening class, club work, extension activities)	47.0	4	98.5	1
12. Impressed the farmers with his school program in agriculture	73.5	1	93	2

Average disparity in rank 1.25.

We note that for each group responding there is a very wide variation for the different items. It is evident that for such a practice as "cooperation with the superintendent" (Item 7) very little difficulty was experienced. On the other hand for such a problem as impressing the farmers with his school program in agriculture, very much difficulty was experienced. A careful study of the table reveals the main points of strength and weakness of the instructors.

The Department's Program of Work: This problem of the department's program of work is very intimately connected with the problem of the training and qualifications of the instructor. Vocational Agriculture cannot succeed merely as a classroom study. Where a broader program has developed the usual phases of his work are: 1. Teaching high school agriculture classes. 2. Teaching elementary agriculture. 3. Part-time work. 4. Evening school group. 5. Teacher training class in agriculture. 6. Club work. Beyond these agriculture duties the agriculture instructor often carries on extra curricula activities.

The next table indicates the desirability of a broad program.

Table 11—Frequencies With Which Agriculture Departments Carried On Organized Agriculture Activities Over and Above Just Teaching High School Classes in Agriculture.

Number of Activities	Number of Departments	
	Continued Departments	Discontinued Departments
1. Teaching High School Agriculture classes only	0	2
2. One additional activity	7	11
3. Two additional activities	16	15
4. Three additional activities	10	9
5. Four additional activities	4	1

Here it is significant to note the disparity in frequencies of activities of the two groups. The schools with

continued departments have considerably more organized activities than do the others. None of the continued departments rely solely on teaching agriculture classes; 81 per cent of them have two or more additional activities and four boast of four additional activities.

This same superiority of continued departments exists for their offerings of Part-time and Evening Work.

Table 12—Frequencies With Which Agriculture Departments Had Organized Part-time and Evening Classes.

Supplementary Activities	Departments Continued	Departments Discontinued
1. No. Part-time or Evening Work...	17	20
2. Part-time or Evening Work.....	19	17
3. Part-time and Evening Work.....	7	2

The table shows that nearly 80 per cent of the continued departments had some Part-time or Evening Work or both as against less than 50 per cent of the discontinued departments having such work. At the other extreme about three times as many continued departments had both types as did the discontinued departments.

Further light is thrown on this problem by the information that in the continued departments only 4 per cent taught more than one other study besides agriculture, while in the discontinued departments nearly 60 per cent taught more than one other study.

In our study it was thought worthwhile to gather information concerning types of agriculture activities carried on by agriculture instructors along with and in connection with their instructional duties. These activities denote functioning of the agriculture departments. A list of items[4] was provided and these were checked by instructors both for continued and discontinued departments.

[4] Part of questionnaire—see appendix.

Table 13—Frequencies With Which Agriculture Instructors Checked Certain Items Pertaining to the Functioning of Their Agriculture Departments.

List of Items	Reports From Instructors	
	Continued Departments 37 Replies	Discontinued Departments 39 Replies
1. Satisfactory carrying out of the farm practice work or project work by most of the boys in the agriculture class	36	27
2. Organization of the boys in agriculture class into a club and hold regular club meetings	12	11
3. Participation by the agriculture department in agriculture judging contests in competition with students from other agriculture departments	36	15
4. The department won a reasonable share of prizes at those judging contests	24	10
5. The department assisted the farmers with their problems such as testing seed corn, securing good seed, soil examinations, testing milk, etc.	34	29
6. Field trips to the farms in the community a usual feature of the agricultural work	35	26
7. Sponsoring meetings of farmers as farmers institutes, corn show, etc.	23	19
8. Agriculture Department held a father-son banquet	2	2
9. Visitation by the farmers to the agriculture department while class was in session a common occurrence	6	5
10. Field trips by the class to creameries, elevators, implement shops, stockyards, etc., a common feature of the work	31	27

11. Public exhibition down town or at the school of some of the work of the agriculture department....	20	18
12. A report of the work of the agriculture department in the local newspaper a common occurrence..	30	20
13. The farmers sought discussion with and help from agriculture department on some of their problems	35	26
14. The department had demonstration teams and these demonstrated in school and at public meetings.	14	9
15. Visitation by the agriculture instructor without his class with farmers at their farms a common occurrence	35	23

From the table we note that in general the reports from the continued departments show a considerably higher frequency for most items, several approximating 100 per cent of the replies for that group.

Significant disparities between the two groups are found in the cases of participation in Agriculture Judging Contests, in winnings at those contests, in field trips, in publicity work, in farmers seeking help from the department, in use of demonstration teams, in visitations of agriculture instructor to farmers without his class and in satisfactory project work. Some of these activities are of more recent development. Father-son banquets and visitation by farmers while class is in session are infrequent. We must conclude from our data that the continued departments functioned considerably better in these activities and doubtless caused and helped the department to continue.

Doubtless recruiting is a vital element in the life of the department. Replies from instructors on this point showed several conspicuous instances where the practice in schools with continued departments was so much better than in the others. Instances of this kind were: visitation of farm homes of prospective students, agriculture instructor assisting in the regular high school registration and

only farm boys and others interested registered for agriculture and registration for agriculture of only those able and willing to meet the requirements.

The major principles of this section applicable to selecting locations for new departments and maintaining existing departments are: the agriculture instructors are well trained, a longer tenure of agriculture instructor is desirable, the agriculture instructor must maintain good programs of work both in the school and in the community, a program of work with several activities is conducive to continuance. Mainly the agriculture instructor should concentrate his energies on agriculture studies. A broad program of work including recruiting actively carried out is conducive to permanence of the agriculture department.

Factor IX—Attitude of the Farm Boys

Previous sections have presented data on availability of students in high school and to enrolments in the agriculture class. Low enrolment in agriculture may occur even when there are available in high school desirable students. The instructor may fail to put enough effort into the recruiting or the students may have developed a negative attitude toward the work. May we say now that we are not at all in sympathy with the program that requires that all the farm boys study agriculture nor with one which expects all the farm boys enrolled in high school to study agriculture. However, it is very reasonable to expect that a goodly number will do so if such a course is offered.

In schools with continued departments of agriculture the number of schools reporting more farm boys enrolled in agriculture than not so enroled was three times the number of schools where the reverse was true. However, in schools with discontinued departments the number of schools reporting more farm boys "out" than "in" exceeded the reverse of this. Comparing schools with continuing and discontinuing departments of agriculture the median enrolment of farm boys in the agriculture classes were 18.1 and 14.3 respectively. While for farm boys not

enroled in agriculture the median numbers were 13.2 and 18.1 respectively. Comparing the other way we get for the continued departments the farm-boy enrolment and farm boys not enroled the median numbers of 18.1 and 13.2 respectively while for the discontinued departments the corresponding numbers are 14.3 and 18.1.

For discontinued agriculture departments a frequently checked reason as a strong factor causing such discontinuance was lack of interest in agriculture by the farm boys. The ex-superintendents checked this as of strong influence in 41 per cent of the cases and the state supervisors checked it as a strong influence in nearly 25 per cent of the cases. It was found that for all strategic groups solicited, that this attitude seemed much more general in the larger schools—those over 100 in enrolment. This condition, of course, reflects something of a negative attitude by the farmers at these schools. In the larger high schools there of course exists the situation besides an aversion to agriculture as a high school study, the fact that in such a school there is a much wider offering of other work.

Besides the above responses, we also sought to find out why certain of the farm boys failed to patronize the agricultural department. In the case, it was of course impossible to locate these students and ask them why. However, we do have on this problem the judgments of the agriculture instructors and the superintendents who had come in contact with these young people.

The respondents checked on these proposed reasons:

(a) Did not care to study agriculture in high school.

(b) Parents did not care to have them study agriculture in high school.

(c) Felt that course did not satisfactorily prepare them for college.

(d) Had definitely chosen to prepare for career other than farming.

In handling these responses they were checked as to frequency and then these were reduced to ranks as shown in the table.

Table 14—Ranks Given by Superintendents and Agriculture Instructors to Different Reasons as to Why Farm Boys in Their High Schools Did Not Take the Agriculture Work Offered in the High School.

Groups Responding	Ranks Given to Different Reasons			
	Lack of Interest (a)	Parental Choice (b)	College Preparation (c)	Other Career (d)
1. Superintendents of Continued Departments	1st	3rd	4th	2d
2. Superintendents of Discontinued Departments .	1st	2nd	4th	3d
3. Agriculture Instructor in Continued Departments	2d	3d	4th	1st
4. Agriculture Instructor in Discontinued Departments	2d	3d	4th	1st

A summary of this table shows "lack of interest" on the part of farm boys as the most potent reason for non-enrolment in the agriculture courses. "Choice of a career other than farming" gets second rank. "Parental influence" seems quite strong but only a few would want to use "high school agriculture credit for college entrance."

Such a factor as "attitude of farm boys" is evidently a significant one in the placement and continuance of a department of vocational agriculture but hard to control. Where new departments are contemplated, at least an attempt should be made to canvass this situation previously at the proposed location.

Factor X—The Superintendent of Schools

In conversation with people who have been in close contact with agriculture departments in high school and have known of their occasional discontinuance, the negative attitude of the superintendent is frequently mentioned

as a causal factor. When mentioned, the usual statement or insinuation is that the superintendent was either not in sympathy with the work, was in opposition to it or laid special emphasis on other work or manipulated things at the time of registration of students or influenced the school board.

The available data in this study show that where the agriculture departments discontinued, they tended to do so when there was a change in the superintendent of schools. In these schools a change of superintendent occurred the same year as discontinuance of agriculture in 42 per cent of the cases considered. Either the school board found it a convenient time to discontinue the work or the new superintendent did not see fit to recommend its continuance. At least we can conclude that when a school is changing superintendents, it is a crucial time in the life of an agriculture department.

Replies from the State Supervisors concerning attitudes of superintendents where agriculture discontinued indicate that negative attitude was a strong factor in some 17.5 per cent of the cases. The same respondents in 35 per cent of the cases reported that the superintendent failed to give the department the necessary attention and support. These data seem to bear out the contention often made that the superintendents do not know how to really help the agriculture instructor to the same degree that they can help teachers of academic studies. In direct contrast to these data the instructors of continuing departments very infrequently checked negative attitude of the superintendents.

One valuable check we have on the superintendents was secured from the agriculture instructors.[5] These were for the discontinued departments. They knew their superintendents and knew his relationship to the agriculture department. Table 15 summarizes their checkings.

[5] Check list on superintendents—see appendix.

Table 15—Percentage of Replies in Ex-instructors Indicating Unsatisfactory Attitude and Unsatisfactory Activity or No Activity of Superintendents Toward Agriculture Department.

Items of Check List	Per-centage
1. Did not believe in Vocational Agriculture in High School	21.5
2. Did not believe Agriculture interest of community warranted the agriculture course at this school	23.1
3. Did not believe the community could afford to carry on the work	10.0
4. Did not feel that the state requirements were satisfactory	32.0
5. Felt that school could not meet the state requirements set up	24.0
6. Not satisfied with the operation of the state supervision of the work	21.8
7. Help he gave instructor in organizing the work of the department unsatisfactory	20.0
8. Help he gave instructor with his teaching problems was unsatisfactory	37.0
9. Help he gave the instructor with his enrolment problems was unsatisfactory	40.0

While all the items are significant, we should note particularly the last three which pertain to the activities of the superintendent. It is significant to note that less "unsatisfactoriness" occurs in his help in organizing the work of the department than in his help with teaching and recruiting problems.

The conclusion is that the superintendent is a considerable factor. Periods of change of superintendent are crucial in the life of the agriculture department. Sometimes he is out of sympathy with the work, at other times he is unable to assist properly the agriculture instructor with his organization and teaching problems.

Other Factors

The whole study undertaken comprises a list of important factors but not necessarily a complete list. Those already mentioned are representative. This digest of the study limits the presentation of substantiating data for

other factors considered and hence only brief mention is made of such additional factors studied here. Costs of agriculture instruction is recognized as a factor. Special types of work in high school are generally expensive. A detailed costs study for agriculture instruction is badly needed.

The associated districts plan, a scheme of school administration for industrial and agricultural work peculiar to Minnesota, was at one time flourishing in that state. In at least several cases, the discontinuance of the agriculture departments was contingent upon the abandonment of this scheme.

No space is available here for a consideration of the attitudes of farm people and town people towards the agriculture course in high school, nor for a presentation of features of state organization, administration and supervision.

Still another important factor studied was that of the attitude of school board members. On the latter factor the author interviewed 22 school board members in 15 schools where agriculture had discontinued. Definite negative attitude was not evident in more than two or three instances.

Relative Strength of Factors of Continuance or Discontinuance

In considering the essential data on these high schools and their departments of agriculture, no practical way of estimating the relative strength of the factors of continuance or discontinuance of the agriculture departments was found. However, the tabulations of replies or "judgments" from the strategic people did lend itself to worthwhile comparisons.

These strategic people, the ex-superintendents, ex-agriculture instructors, state supervisors and school board members checked the lists of factors presumably responsible for discontinuance for the agriculture departments. The relative frequency with which the different items were checked gives at least an approximation of the rela-

tive potency of the factors as viewed by the different groups and gives us an opportunity to check one group against the others. The frequencies were reduced to percentages of totals for that group and Chart 1 is the graphic representation of the whole situation.

A careful study of the chart is very much worthwhile. The groups of strategic people who checked are named at the heads of the columns. The key denotes the relative frequency with which these people regarded these factors. For instance, Factor 1, "Low enrollment in the agricultural course" is regarded as a significant factor for discontinuance in the schools where they had experience by more than 60 per cent of the ex-superintendents, by from 15 per cent to 30 per cent of the agriculture instructors and by more than 60 per cent of the school board members. The state supervisors, coming in contact with all the schools, regarded this factor as a potent one in more than 60 per cent of the schools. The remainder of the chart is to be interpreted in a like manner.

One could not expect perfect agreement of these different groups but upon examining the chart he is struck by the tendency to heavier shading at the top and lighter portions at the bottom thus indicating general relative strength of these factors. The reader should regard it, as does the author, as an approximation.

SECTION IV

SUMMARY OF PRINCIPLES OF PLACEMENT DERIVED FROM THIS STUDY

The constructive phase of this study is, the derivation of principles or criteria for the placement of Departments of Vocational Agriculture. Doubtless some of these have previously been stated by workers in the field who have arrived at such principles from their own field experience. The principles summarized here have been derived from an objective study of apparent factors of continuance and discontinuance of Departments of Vocational Agriculture.

List of Principles

I

Choice of a reasonably sized high school. Chances for continuance are significantly better on one of more than 100 pupils.

II

Choice of a school with a reasonably sized assessed valuation. In the school district surely the valuation should be more than $500,000 and better to have a valuation of $1,000,000 or above.

III

Departments of agriculture tend to continue to the highest degree in schools where the tax rate is medium. Discontinuance was more prevalent where the tax rate was very high or very low.

IV

Considering high schools of 100 students or less, departments are much more likely to persist in the consolidated school than in the non-consolidated school. Where agriculture is to be placed in the smaller high school the choice of a consolidated school is a distinct advantage.

V

Some departments discontinued because of the negative attitude and unwillingness and inability of the superintendents to develop such work in their schools. New departments should be placed where the superin-

tendents are vitally interested and believe in the work and where they are capable of helping the instructor develop a strong department.

VI

Much coincidence was found in periods of time when there was a change of superintendent at the school and discontinuance of the department. Local school boards and the state supervisor should regard these as crucial times in life of the departments and should be watchful and try to help the school over these periods.

VII

Departments should be located within agriculture communities, or in communities with an agriculture clientele. Centers too large with many industrial and commercial interests or in undeveloped agricultural regions are not conducive to the work.

VIII

Our evidence indicates that the quality of the instructor and his work was a significant factor of continuance. The principle is that the local and state authorities should endeavor to choose and hold good instructors.

IX

In order to maintain itself the department should develop a relatively broad program with at least two or three other legitimate activities of an agriculture department as part time and evening work, besides teaching classes of high school students.

X

The time of the instructor should be largely or wholly concentrated on agriculture rather than teaching other high school classes.

XI

The instructor should aim to organize the work of the department well having the class members compete in competitions with other schools and providing for publicity of work done.

XII

Good recruiting of students is essential to the life of the department.

XIII

Departments with an enrolment of 20 or more are considerably more likely to survive than are those less than 20. Schools where the enrolment is near the state minimum for enrollment are in danger of discontinuing their agriculture departments.

XIV

Negative attitudes of farm boys and farmers to agriculture and agricultural instruction are significant factors in discontinuance of agriculture departments.

XV

In times of agricultural depression the instructor and supervisor should be alert to the undermining influence of wrong attitudes. At such times school retrenchment may occur and agriculture and other special lines of work may be discontinued.

SECTION V

DISCONTINUANCE OF DEPARTMENTS AND PLACEMENT PROCEDURES IN SEVERAL STATES

Only a general survey of conditions in a few other states is made in this study. The selection of other states was made from suggestions made by C. H. Lane, Chief of the Agricultural Education Service and by the Federal Regional Agents, A. P. Williams, R. D. Maltby, J. A. Linke and W. T. Spanton. Selection was made largely on the basis of attention having been given and planning made for the most satisfactory placement of Departments of Vocational Agriculture. The additional states were Arkansas, California, Illinois, Iowa, Ohio, Massachusetts, New York, South Dakota, Texas and Virginia. An inquiry[6] containing several pertinent questions was sent to each of the state supervisors in these states. These returns were analyzed. Additional information was secured from the printed state plans for agricultural education in these states. In all of the states there had been more or less discontinuance of agriculture departments. What has happened has been a considerable shifting in the identity of schools on the lists even though total numbers of departments in a state have grown. Once discontinued, departments have seldom been re-started. No attempt was made to secure specific reports of apparent causes of discontinuance of agriculture departments directly from the departments of these other states.

Causes of Discontinuance

The state supervisors were asked to list out the six or eight main reasons which have caused the departments to be discontinued in their states. The replies were a rather miscellaneous lot but some success at a classification was made as shown in the table.

[6] Inquiry to State Supervisors—see appendix.

Table 16—Main Causes of Discontinuance of Agriculture Departments as Reported by Supervisors of Agriculture of Ten States.

Factors	Frequency of Mention
I. Instructor	
1. Poor teaching	4
2. Weak instructor	4
3. New instructor could not qualify	1
II. Superintendent	
1. Academically minded	1
2. Change of Superintendent	1
III. School Board	
1. Change of Board	1
2. Lack of interest—local school office	1
3. Negative attitude	1
IV. Pupils	
1. Not enough pupils	3
2. Boys' attitude, local per capita income too high	1
3. Lack of interest in farming as vocation	1
4. Unit too small	1
V. Community	
1. Not agriculturally placed	2
2. Lack of interest of community	1
3. Lack of interest in farming as a vocation	1
4. Local "squabble"	1
5. Competition of state schools	1
6. Dev. and Expansion of industrial work in schools	1
VI. Finances	
1. Crop failures	1
2. District economizing	1
3. Unit too small	1
4. Limited local finances	5
5. Agricultural depression	3
VII. Miscellaneous	
1. Poor school organization	1
2. Failure to meet requirement of state board	1

According to the classification made, finances stand out as the strongest factor. Limited finances seems to be the most troublesome factor. After finances, the instructor seems to be the second most significant factor. The items "poor teaching" and "weak instructor" doubtless overlap. The type of community seems to make considerable difference.

While not exhaustive enough perhaps to be conclusive, these "free" replies of the state supervisors are certainly suggestive of items demanding attention in choice of locations for new departments and in the administration of the existing ones.

Placement Procedures and Practices

The state supervisors of these ten states were also solicited to report on their practices and procedures in placing new departments. Because of the variety of practices in states in specifically stating their requirements and in allowing the state supervisor to rule on others, no complete classification of practices and procedures is here given. We are giving, however, a list of different items reported, on which decisions are regularly being made in the interests of permanency.

1. A school is expected to have at least 25 farm boys enrolled for a full time department.
2. School required to furnish rooms, shops, etc.
3. School required to secure a teacher meeting the qualifications set up by the state board.
4. We try to gauge the interest of school officials, community and school boards as far as possible.
5. During the last few years it has also been necessary for us to make a rather careful study of the financial ability of the school to support special departments.
6. We also take into account the place of organized agriculture in the community.
7. The high school must be located in an agricultural district with a large percentage of boys attending high school living on farms who, from all indications, will ultimately become farmers.
8. That the high school administrators are willing to cooperate to the fullest extent, the executing of the requirements of our state plan.
9. The main industry in the community must be agriculture.
10. At least three high school teachers in addition to the agriculture teacher must be teaching.
11. Local committee studies the local situation with respect to:
    1. Need for a department.
    2. Present enrollment and interest of pupils.
    3. Patronage area of the school.
    4. Rural school pupils.
    5. Willingness of organizations to support a department.

12. The attitude of the community and superintendent.
13. A reasonable per capita cost and reasonable prospects of success in connection with the various factors involved.

The foregoing is, of course, a composite list from several sources. No indication is given that any one state is using all of them. No information is at hand as to how rigidly these are applied. Only in a few cases were specific standards stated. These referred to as minimum enrolments and qualifications of the instructor. The list is suggestive that a rather complete checking list should be devised against which the features of any school or any community contemplating an agriculture department could be checked preliminary to placing a department of agriculture.

Summary of Placement Procedures and Practices

In no case was it reported that "promotion programs" were put on to increase the number of departments and apparently considerable caution was being taken in trying to place departments strategically.

1. Each state requires certain minimum requirements but the state supervisor's decisions and rulings seem to have considerable weight in placing departments.
2. No one state seems to have a complete check list to guide in placement.
3. Local initiative and interest seem essential to strategic placement and are rather highly considered by those in authority.
4. With the exception of certain legal phases, procedures in placement seem as yet to be generally unstandardized.
5. The preliminary survey in a community seems to be quite common and a necessary step.
6. The local superintendent seems to be considered a strategic person in the placement of departments. The school board takes formal action in instituting the department.

SECTION VI

CONCLUSIONS AND RECOMMENDATIONS

Only brief space can be allowed for conclusions and recommendations from this study. A considerable list of factors affecting continuance and discontinuance has been presented and a summary of the principles derived has been set up in Section IV. Some of the factors as agricultural depression, seem to operate rather independently of any control we can exert. Other factors seem to be inherent in the school system as school organization, recruiting of students and attitude of superintendent and can be susceptible only to a general control. Others are inherent in the department and definitely controllable as placement of a new department in a reasonably sized school with a good valuation and hiring a good instructor.

Principles other than those specifically mentioned in this study are to be implied. Evidently in the whole plan of vocational education in agriculture with the state and federal agencies helping and stimulating the local unit the state must do its share in placing agriculture departments and doing what it can to maintain and develop these departments as efficient units by financial aid and expert supervision. It would also seem that departments should be well distributed geographically both to advertise the work in the different sections and to avoid competition of departments for students.

No claim is made that this set of principles is complete and adequate to place and administer high school departments of agriculture in a state. They are derived largely from a study of conditions in one state—Minnesota. However, it is a working list. A **positive approach** through the measurement of results in successful deartments and determining the features and characteristics of these departments will make its contribution to an adequate set of principles. Study of the experiences of other states particularly as to their evolved placement procedures and use of checking lists as reviewed in Section V should prove helpful.

It is hoped that state supervisors, local superintendents of schools and others interested and responsible for locating new departments or administering those already existing may find here a list of principles which will better guide them in their work. Having at hand this list of principles or criteria, all the possible centers or locations for agriculture departments in the state should be checked against the list by using data now available for such centers and by actual personal surveys, to determine beforehand where departments of agriculture should be placed. Finally in the light of experience by the use of such criteria, needed revisions of state requirements and procedures will be rationally made.

APPENDIX A—QUESTIONNAIRES

TO SUPERINTENDENTS AND AGRICULTURE INSTRUCTORS WHO ARE RESPONSIBLE FOR AGRICULTURE DEPARTMENTS OPERATING AT PRESENT OR WHO WERE RESPONSIBLE FOR AGRICULTURE DEPARTMENTS WHICH DISCONTINUED

The purpose of this study as stated to you a few days ago in a letter from Dr. A. V. Storm of the Department of Agricultural Educaton, University of Minnesota, is to ascertain what factors have operated and are operating to cause departments of agriculture in some schools in Minnesota to discontinue and other schools to persist, and your cooperation and assistance by contributions from your experience was solicited. For those schools where the departments of agriculture are operating at the present time, we are soliciting information from present superintendents and agriculture instructors. For those schools where the departments of agriculture have been discontinued, we are soliciting information from superintendents and agriculture instructors **who were at the schools when the work was discontinued.** Most of these men have now taken up new positions in school work or in other professions. It is especially for the convenience of this latter group that we have carefully labelled each set of questions as to which school and department is meant.

We have carefully constructed the schedule of questions so that it consists mostly of checking of items and it can be answered in a minimum of time.

As explained in Dr. Storm's letter, your school is not under investigation, and only composite results from many schools or results from unidentified schools will be disclosed.

This blank was filled by

Name.....

Address.....

A return envelope is inclosed.

It is the summarization of your experience on this problem with that of many others that will give value to this study and we hope you will spare the short time necessary to read and check the lists of items. In doing this you are making a real contribution to the study of the problem.

Sincerely yours,

QUESTIONS PERTAINING TO THE COMMUNITY AND THE SCHOOL

Name of School .....
Name of Superintendent answering .....

Answer for schools which have departments of agriculture operating at the present time should be in terms of the present school year (1926-27).

Answers for schools where the department of agriculture has been discontinued should be in terms of the year of discontinuance.

In the spaces provided, either check (X) the appropriate item or fill in the data asked for.

1. School District Area
   a. ( ) Co-terminus with the boundary of village or city.
   b. ( ) Includes rural territory outside the village or city.
   c. ( ) Number of sections of land of rural territory included.
2. Number of pupils enrolled in high school grades (9-12)
   ( )Boys ( ) Girls
3. Number of farm boys enrolled in high school ( )
4. Number of tuition pupils enrolled in high school ( )
5. Competition for enrollment of students with other nearby high school.....Name such school
   ( ) Miles distant
6. Competition for enrollment of agriculture students with other nearby department of agriculture.
   .....Name such Agriculture Department
   ( ) Miles distant.
7. Give exact figures or estimate the per-pupil cost of instruction per year in these high school studies. If figures given are **exact** please **underline them.**
   ( ) English
   ( ) Algebra
   ( ) General Science
   ( ) Physics
   ( ) Commercial Studies
   ( ) Agriculture
8. Check (X) other special curricula or courses given at the high school at the same time the agricultural course was given.
   ( ) Manual Training
   ( ) Home Economics
   ( ) Commercial Course
   ( ) Teacher Training

9. Which of the courses in No. 8 dropped out at about the same time the agriculture did or recently.

....

10. Please give name and address of one who was a school board member at the same time that the agriculture work was discontinued and who knows of the school board's action in discontinuing the work.

Name ..... Address .....

QUESTIONS PERTAINING TO THE AGRICULTURE DEPARTMENT IN THE SCHOOL

Name of School .....

Name of Person Answering .....

Answers for schools which have departments of agriculture operating at the present time should be given in terms of the present school year (1926-27).

Answers for schools where the department of agriculture has been discontinued should be in terms of the year of discontinuance.

In the spaces provided, either check (X) the appropriate item or fill in the data asked for.

1. ( ) Agricultural interests of the community enough to warrant a department of agriculture in the school.

The teaching program of the agriculture instructor.

Check (X) the types of work carried out and fill in the data asked for.

2. ( ) Grade class in agriculture
   Check grade ( ) 7th
   ( ) 8th
   Number in class ( ) Boys
   ( ) Girls
3. ( ) Teacher Training class in Agriculture
   Number in class ( ) Boys ( ) Girls
4. ( ) Part time class in agriculture (Short course usually conducted for farm boys not otherwise enrolled in high school).
   ( ) Number of boys in class.
   ( ) Number of weeks length of course.
5. ( ) Evening class in agriculture (evening course usually conducted for adult farmers).
   ( ) Number of groups or classes that year
   ( ) Number of meetings per week.
   ( ) Number of weeks course ran.
   ( ) Total number registered for such work.

6. ( ) Give number of regular high school classes in agriculture for one year.

7. ( ) Give the names of high school classes in agriculture (No. 6) and enrollments. (Use such names as are customarily used in your school as Agric. I—Agric. II, etc. or Crops class, Animal Husb. class, etc.).

Name of Class	Total Enrollment	Number of Boys	Number of Girls
.....	( )	( )	( )
.....	( )	( )	( )
.....	( )	( )	( )
.....	( )	( )	( )

8. Give names of non-agriculture high school classes taught by agriculture instructor.

....

....

9. ( ) Number of different farm boys in all the regular high school agriculture classes (No. 7). Count no pupil twice.

10. ( ) Number of farm boys enrolled in high school but who did not enroll in the agriculture course.

11. Check (X) reasons why boys (No. 10) did not enroll in agriculture course.

( ) Did not care to study agriculture in high school.

( ) Parents did not care to have them study agriculture in high school.

( ) Felt that course did not satisfactorily prepare for college.

( ) Had definitely chosen to prepare for career other than farming.

Give others .....

12. Indicate any significant change in total numbers of students enrolled in high school classes in agriculture for the three years previous to the discontinuance of the course.

13. Indicate any significant change in the number of farm boys in agriculture for the three years previous to the discontinuance of the course.

14. Check (X) types of work ordinarily given within the department. Please indicate where courses were combined.
( ) Field Crops
( ) Soils
( ) Animal Husbandry
( ) Dairying
( ) Poultry
( ) Horticulture
( ) Farm Shop
( ) Agricultural Engineering
( ) Farm Management
( ) Rural Social Science
( ) Agricultural Arithmetic
( ) Teacher Training in Agr.

15. Units of high school credit in agriculture.
( ) Number which might be earned by boys in four years of high school work.
( ) Number usually earned by boys in four years of high school work.

Recruiting Students for Regular Agriculture Classes

(Check (X) the activities or practices which were utilized).

16. ( ) Agriculture instructor visited farm homes of prospective agriculture students and explained the work of the agriculture department to them.

17. ( ) Agriculture instructor present and assisted in the registration of high school students including those in agriculture.

18. ( ) Work of the different high school departments, including agriculture was explained to the students before registration.

19. Students unsuccessful in other high school work were assigned to work in the agriculture department by superintendent or principal.

20. ( ) Superintendent and principal made special effort to get good type of agriculture students enrolled in agriculture classes.

21. ( ) Only farm boys and others interested in agriculture work allowed to register in this course.

22. ( ) Only those able and willing to meet requirements for supervised farm practice (project work) allowed to register in the course.

Add others.
( )
( )

Functioning of Agriculture Department

Check (X) the activities or practices which were carried out.

23. ( ) Satisfactory carrying out of the farm practice work or project work by most of the boys in the agriculture class.

24. ( ) Organization of the boys in agriculture class into a club and had regular club meetings.

25. ( ) Participation by the agriculture department in agriculture judging contests in competition with students from other agricultural departments.

26. ( ) The department won a reasonable share of prizes at these judging contests.

27. ( ) The department assisted the farmers with their problems such as testing seed corn, securing good seed, soil examinations, testing milk, etc.

28. ( ) Field trips to the farms in the community a usual feature of the agriculture work.

29. ( ) Sponsoring of meetings of farmers as farmers institutes, corn show, etc.

30. ( ) Agriculture department held a father-son banquet.

31. ( ) Visitation by the farmers to the agriculture department while class was in session a common occurrence.

32. ( ) Field trips by the class to creameries, elevators, implement shops, stock yards, etc., a common feature of the work.

33. ( ) Public exhibition down town or at the school of some of the work of the agriculture department.

34. ( ) A report of the work of the agriculture department in the local newspaper a common occurrence.

35. ( ) The farmers sought discussion with and help from the agriculture department on some of their problems.

36. ( ) The department had demonstration teams and these demonstrated in school and at public meetings.

37. ( ) Visitation by the agriculture instructor without his class with farmers at their farms a common occurrence.

Add others.

38. ( )

39. ( )

OTHER QUESTIONS PERTAINING TO THE DEPARTMENT

40. Check (X) which was the chief factor in getting the agriculture department started in the school.

( ) Superintendent of schools.
( ) School Board.
( ) Farmers of the community.
( ) Commercial club or service club.
( )
( ) State supervisor of agricultural education.
( ) High school inspector.
( ) County agent.
( ) County superintendent of schools.
( )

41. ( ) Availability of state aid for such work was a **strong** incentive in getting the work started there.

42. Check (X) which was really the main factor in getting the work dropped from the school.

( ) Superintendent of schools.
( ) School Board.
( ) Principal.
( ) State supervisor of agricultural education.
( )
( )

43. ( ) Number of visits made by state supervisor of agriculture to the school during the last year that the course was operating.

44. ( ) Number of visits made by staff of department of agricultural education of the College of Agriculture during the last three years of the course.

45. If the State Supervisor of Agriculture warned the school that unless improvement was made the department would be dropped from the list, what deficiencies and criticisms of the work of the department did he point out?

.....

.....

.....

.....

46. List in order of importance the two or three things or conditions which in your opinion were responsible for the department being discontinued.

.....

.....

.....

.....

47. What two or three things, in your opinion, could have been done to prevent this department of agriculture from dropping out?

.....

.....

.....

.....

CHECKING LIST ON AGRICULTURE DEPARTMENT

For those reporting for a school where the department of agriculture has been discontinued. Doubtless some of the factors listed below **operated for the discontinuance** of this department. Please check (X) in the appropriate column, the strength with which each factor seemed to operate. (If the factor is not checked, we will assume that you do not believe that it operated in case of this school).

For those reporting for a school where the agriculture department is operating at the present time. Likely some of the factors listed below **operated on this department but not to the extent of causing discontinuance.** Please check in the appropriate column the strength with which each factor seemed to operate. (If the factor is not checked, we will assume that you do not believe that it operated in case of this school).

List of Possible Factors	Check (X) Strength of Factor		
	Strong	Medium	Weak
1. General decline in agricultural prosperity of the community and region			
2. General retrenchment in school. All school costs too high			
3. Agricultural instruction costs as compared to non-agricultural instruction costs, too high			
4. High school too small to successfully and economically maintain such a department			
5. Too few students in agricultural course			
6. Inadequate recruiting of students for the department			
7. Competition for enrollment students of agriculture by nearby department			
8. Students from farm homes do not care to study agriculture			
9. Lack of cooperation between the village and farm folks prevented an adequate school program			
10. Village folks were opposed to the support of the agriculture course			
11. Farm folks were neutral or negative in attitude towards such a course			
12. School board was not in sympathy with such a course			
13. School board failed to give the department the necessary attention and support			
14. Superintendent of schools were not in sympathy with such a course			
15. Superintendent failed to give the department the necessary attention and support			
16. High school principal was not in sympathy with such a course			

17. High school principal failed to give the department the necessary attention and support			
18. Lack of rooms to satisfactorily carry on the work			
19. Lack of equipment and facilities for the department to satisfactorily carry on the work			
20. Too frequent change of agriculture instructor			
21. Failure of agriculture instructor to adequately organize and carry out the work of the department....			
22. Failure of agriculture instructor to make the work of the department vital in the life of the community			
23. Insufficient attention by state supervisor of agricultural education for the success of the work....			
24. Unsatisfactoriness of the state supervision for the success of the work			
25. Inability of the school to meet the state requirements for such a department			
a. Minimum enrollment			
b. Rooms and facilities			
c. Scheduling of agriculture classes.			
d. Limiting the agricultural instructor to agriculture only.....			
e. Grade agriculture instruction ...			
26. School able but unwilling to meet state requirements for such a department			

List other factors.
Check list on
Superintendent of Schools.
High School Principal.

Name of Superintendent.....

Principal .....

The object of this check list is to get your reaction to the attitude of the superintendent towards the agriculture work and his activities in relation to it so as to better judge the agriculture work of the school. Neither the school nor the superintendent or principal is under investigation. Only composite results from many schools or results from unidentified schools will be disclosed.

Single underscore the correct answer. **Double underscore** if any answers which you feel should be emphasized.

1. He (believed—dd not believe—in vocational agriculture work in high school.
2. He (believed—did not believe) that the agricultural interests of the community warranted the agriculture course in this school.
3. He (believed—did not believe)that the community could afford to carry on the work.
4. He felt that the state requirements for such work were (O. K. —too exacting—not exacting enough).
5. He felt that this school (could—could not) meet the state requirements setup.
6. He (was satisfied—unsatisfied) with the operation of the state supervision of this work.
7. The help he gave to the agriculture instructor in the organization of the work of the department was (satisfactory—unsatisfactory).
8. The help he gave to the agriculture instructor with his teaching problems was (satisfactory—unsatisfactory).
9. The help he gave to the agriculture instructor with his enrollment problems was (satisfactory—unsatisfactory).

Please read list of items again with this in mind:

If you are reporting for a school where the agriculture department has been discontinued please read the list of items again and place a circle around the number of each of those items n which you regard the attitude or the activity named **was so negative** as to be at least partly responsible for the department being discontinued.

If you are reporting for a school where the agriculture department is still operating please read the list of items again and place a circle around the number of each of those items in which you regard the attitude or activity named **was so favorable** as to be a strong influence in maintaining the department.

CHECK LIST ON THE AGRICULTURE INSTRUCTOR

Name of Instructor.....

The object of this check list is to get your reaction on the ability and preparation of this instructor and on the quality of service he rendered so as to better judge the agriculture work of the school. Neither the school nor instructor is under investigation. Only the composite results from many schools or results from unidentified schools will be disclosed.

List of Items	Check (X) in Appropriate Column			
	Very Good	Good	Fair	Poor
1. Mature enough for the work				
2. Adequacy of experience teaching agriculture				
3. Adequacy of his preparation for organizing and teaching vocational agriculture				
4. Personal qualities for success in the work				
5. Identified himself well with the best interests of village and city there				
6. Developed the agriculture department as an integral part of the school				
7. Cooperation with the superintendent				
8. Cooperation with the principal and with fellow workers in the school				
9. Success of his classroom work....				
10. Success of his project work and his supervised practice work.....				
11. Adequately broad program of work in the agriculture department (All Day, Part Time, Evening Class, Club Work, Extension activities				
12. Impressed the farmers with his school program in agriculture.....				
13.				
14.				

Please read the above list of items again with this in mind:

If you are reporting for a school where the agriculture department has been discontinued please read the list of items again and place a circle around the number of each of those items in which you regard that the activity named **was so poorly carried out** as to be at least partly responsible for the department being discontinued.

If you are reporting for a school where the agriculture department is still operating please read the list of items again and place a circle around the number of each of those items in which you regard the activity named **was well carried out** and is a strong influence in maintaining the department.

CHECK LIST ON THE STATE SUPERVISOR OF AGRICULTURAL EDUCATION

Name of Supervisor.....

The object of this check list is to get your reaction to the work done by the state supervisor in connection with this school so as to better judge the agriculture work of the school. The supervisor is not under investigation and no identified checkings will be disclosed.

1. He made (too few—enough—too many) visits to the school for the good of the agriculture work there.
2. The extent to which he furnished information and help to the superintendent and principal in regard to the agricultural work was (satisfactory—unsatisfactory).
3. The extent to which he furnished information and help to the agriculture instructor in regard to the agriculture work was (satisfactory—unsatisfactory).
4. The tact with which he required adherence to the state requirements in vocational agriculture was (satisfactory—unsatisfactory).
5. His appreciation of the educational needs of the community, both vocational and non-vocational, was (satisfactory—unsatisfactory).
6. He was (satisfied—dissatisfied) with the type and quality of the agriculture work being done at the school.
7. The attention he gave to difficulties of the department and the advice and energy he gave to correct them was (satisfactory—unsatisfactory).

Add any other items you believe were significant.

Answered by School Board Members

CHECKING LIST ON AGRICULTURE DEPARTMENT AT

.....

Check (X) in the parentheses after each number, those factors which seem to best state the reasons why the agricultural department was discontinued. Double check (XX) the two or three which you believe were the **main reasons.**

I. Community and Economic

1. ( ) General decline in agricultural prosperity of the community and the region.
2. ( ) Costs of agricultural studies, as compared with other high school studies, too high.
3. ( ) Lack of cooperation between the village and farm folks prevented any adequate school program.
4. ( ) Village folks were opposed to the support of the agriculture course.
5. ( ) Farm folks were neutral or negative in attitude towards the agriculture course.

II. The School

6. ( ) High school too small to successfully and economically maintain an agriculture department.
7. ( ) School board was not in sympathy with such a course.
8. ( ) Superintendent of schools or principal not in sympathy with such a course.
9. ( ) Lack of rooms and equipment to properly carry out the work.

III. The Pupils

10. ( ) Too few students in the agriculture course.
11. ( ) Students from farm homes did not care to study agriculture.

IV. The Agriculture Instructor

12. ( ) Failure of agriculture instructor to adequately organize and carry out the work of the department.
13. ( ) Failure of the agriculture instructor to make the work of the department vital in the life of the community.
14. ( ) Too frequent change of agriculture instructor.
15. ( ) Inadequate recruiting of students for the department of agriculture.

V. The State Department of Education

16. ( ) Insufficient attention by state officers and unsatisfactory state supervision for the success of the work.

17. ( ) Too rigid state requirements set up for school to get its aid—school unable or unwilling to meet the requirements set up.

Use back of this sheet.

I would appreciate receiving any additional statements you may care to make regarding school board's procedure in dropping the work mentioning what groups of people took the initiative and any opposition which developed to the dropping of the work.

Yours respectfully,

C. R. WISEMAN.

Questions Answered by Several State Supervisors

Problem—Placement of Departments of Vocational Agriculture Within a State.

1. Please send to me a copy of your State Plans for Vocational Agriculture (1922-1927).
2. Please indicate or give reference to **Requirements** set up for a school in your state undertaking to establish a new department of vocational agriculture.
3. To what extent are these **Requirements** part of your state Plans of State Board Rulings, of Decisions of State Supervisor of Agriculture?
4. Please indicate other **policies** or **principles** you follow or other **favorable features** of the **community** and **school** you seek in placement of a new department.
5. What are the usual **Steps** or **Procedures** in the **Placement** of a new department?
   a. What part is played by the local superintendents?
   b. What part is played by the local school board?
   c. What part is played by the State Supervisor of Agricultural Education?
   d. What part is played by the State Board of Education?
   e. What part is played by others?
6. Please indicate any contemplated changes in the above **Requirements** or **Procedures.**

7. Please report here the numbers of the departments discontinued at the end of each of the following school years: (Discontinued is to mean "not included in the list of vocational agricultural departments for your state for the following year.").

1920-21.....	1923-24.....
1921-22.....	1924-25.....
1922-23.....	1925-26.....
	1926-27.....

8. Please report here the number of discontinued departments (from total in No. 7 which have been restarted).
Answer.....
9. Thinking in terms of departments of agriculture, which have been discontinued in your state within the period of time indicated in No. 7, please list in order of importance the six or eight main factors or reasons which have caused the departments to be discontinued.

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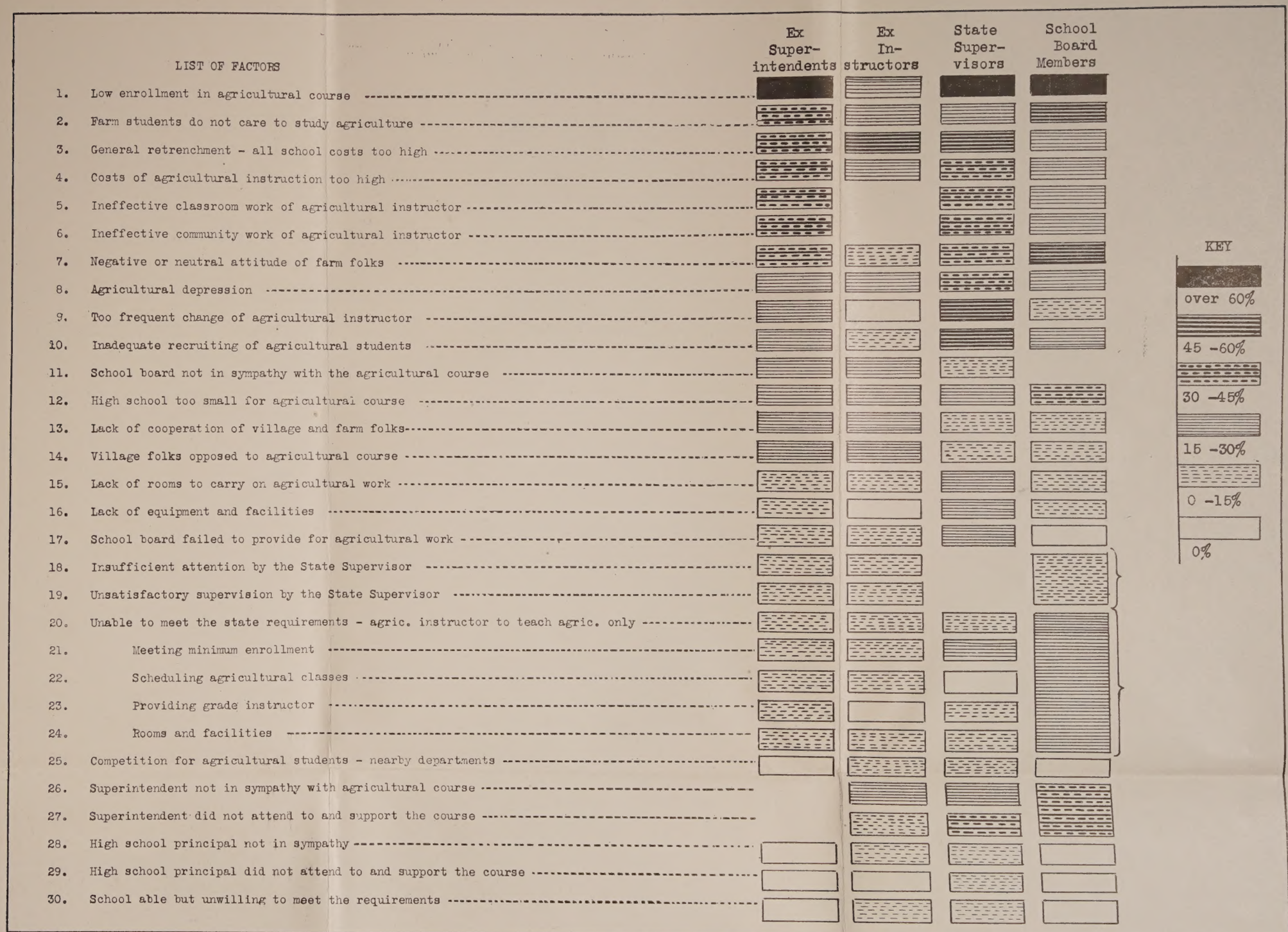
LIST OF FACTORS
Ex Super-intendents
Ex In-structors
State Super-visors
School Board Members
1. Low enrollment in agricultural course
2. Farm students do not care to study agriculture
3. General retrenchment - all school costs too high
4. Costs of agricultural instruction too high
5. Ineffective classroom work of agricultural instructor
6. Ineffective community work of agricultural instructor
7. Negative or neutral attitude of farm folks
8. Agricultural depression
9. Too frequent change of agricultural instructor
10. Inadequate recruiting of agricultural students
11. School board not in sympathy with the agricultural course
12. High school too small for agricultural course
13. Lack of cooperation of village and farm folks
14. Village folks opposed to agricultural course
15. Lack of rooms to carry on agricultural work
16. Lack of equipment and facilities
17. School board failed to provide for agricultural work
18. Insufficient attention by the State Supervisor
19. Unsatisfactory supervision by the State Supervisor
20. Unable to meet the state requirements - agric. instructor to teach agric. only
21. Meeting minimum enrollment
22. Scheduling agricultural classes
23. Providing grade instructor
24. Rooms and facilities
25. Competition for agricultural students - nearby departments
26. Superintendent not in sympathy with agricultural course
27. Superintendent did not attend to and support the course
28. High school principal not in sympathy
29. High school principal did not attend to and support the course
30. School able but unwilling to meet the requirements
KEY
over 60%
45 -60%
30 -45%
15 -30%
0 -15%
0%

Chart 1. - Relative Values Given by Groups of Strategic People on Several Factors Causing Discontinuance of Agricultural Departments.

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